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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/617,827	07/14/2003	Shoichi Osada	0171-0990P	5224
2292	7590	06/03/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			ZIMMER, MARC S	
			ART UNIT	PAPER NUMBER
			1712	
DATE MAILED: 06/03/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/617,827	OSADA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Marc S. Zimmer	1712	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

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***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maeda et al., WO 99/01507 in view of Shiobara et al., U.S. Patent # 5,225,484 for the reasons made of record in the correspondence dated January 22, 2004.

As a means of overcoming the rejection under 35 U.S.C. 103, Applicant has submitted a declaration that outlines differences in several properties of epoxy compositions that differ only in the identity/structure of the organopolysiloxane additive. Unfortunately, the Examiner sees no probative value in the comparison whatsoever.

Section MPEP 716.02(e) instructs that, "an affidavit or declaration under 37 CFR 1.132 must compare the claimed subject matter with the closest prior art to be effective to rebut a prima facie case of obviousness. *In re Burckel*, 592 F.2d 1175, 201 USPQ 67 (CCPA 1979). "Evidence of unexpected properties may be in the form of a direct or indirect comparison of the claimed invention with the closest (for emphasis) prior art which is commensurate in scope with the claims." *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). "Where there are deviations from the closest prior art, they must 1) be explained and 2) shown unlikely to influence the outcome of the comparison. *In re Finley*, 81 USPQ 383; *Ex Parte Armstrong*, 126 USPQ 281; *In re Widmer*, 147 USPQ 518; *In re Magerlein*, 202 USPQ 473. In the alternative, "Applicants may

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compare the claimed invention with prior art that is more closely related to the invention than the prior art relied upon by the examiner." *In re Holladay*, 584 F.2d 384, 199 USPQ 516 (CCPA 1978).

The invention suggested by the combination proposed by the Examiner meets every limitation of the aforementioned claims wherein Maeda teaches a composition comprising components (A), (B), (C), and (E) and Shiobara provides a motivation to incorporate a copolymer equivalent to (D) into the composition taught by Maeda. Contrary to what is stated by Applicant, Shiobara does not disclose the addition of any siloxane polymer other than the epoxy-siloxane copolymer mandated by the claim. Further, the skilled artisan would have every expectation that an epoxy-silicone copolymer would impart better crack resistance to an unhalogenated epoxy resin formulation, such as that disclosed by Maeda, just as it did in the halogenated epoxy resin disclosed by Shiobara.

For the combination established by the Examiner to be proven unobvious, Applicant would have to illustrate some unexpected synergy between the copolymer taught by Shiobara and a component of Maeda's composition that results in an improvement of one or more properties that is significantly greater than what might be expected from an additive affect. That is to say, if two materials are known to convey a similar benefit upon a composition, it is expected that if both materials are added to the same composition, an improvement commensurate with the amounts of these materials might be observed. If, however, the improvement recorded is markedly greater than what might have been expected based on the fact that there is simply more of the

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property-improving materials, than synergy is properly illustrated and the invention is demonstrated to be unobvious. Were Applicant to show, for instance, that the zinc molybdate and the epoxy-silicone copolymer together provide better flame retardance than would be expected on the basis of an additive effect alone, the claims might then be considered allowable. (This experiment is offered only by way of example and Applicant should appreciate that a demonstration of synergy for some other beneficial property of the composition that is induced, in part, by the copolymer would be acceptable.)

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc S. Zimmer whose telephone number is 571-272-1096. The examiner can normally be reached on Monday-Friday 8:00-4:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

June 1, 2005

*Marc Zimmer*  
Marc Zimmer  
AU 1712